

## REMARKS

Claims 71-73, 77-81 and 83-90 have been previously submitted and are currently pending. Claims 91-95 are newly added, and claims 1-20, 74-76 and 82 have been previously canceled. Antecedent support for the newly added claims is found in the original claims and throughout the specification.

Claims 71-73, 77-81 and 83-90 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Cummings et al. (U.S. Patent No. 5,464,778). Claims 71-73, 77-81 and 83-90 have also been rejected under 35 U.S.C. §103(a) as being obvious over Cummings et al. in view of Larsen et al. (U.S. Patent No. 5,840,679). These grounds of rejection are traversed.

The Examiner states that the declaration filed in this application under 37 C.F.R. §1.131 fails to establish a reduction to practice of the invention in this country prior to the effective date of the prior art. In particular, the Examiner states that the declaration must establish possession of either the whole invention claimed, or a subset of the claimed invention, falling within the scope of the claims, citing *In re Tanczyn*, 146 USPQ 298 (CCPA 1976), and MPEP 715.02.

With regard to the Cummings et al. reference, the Examiner states that the reference teaches the use of PSGL in the treatment of leukocyte adherence, inflammation and coagulation, and that applicants have not demonstrated that they were in possession of PSGL-1 and its use for treating atherosclerosis prior to the effective date of the reference. The Examiner concludes that applicants reliance on a generic concept does not support the use of PSGL-1 in treating atherosclerosis. Applicants respectfully disagree with this conclusion.

The declaration submitted by applicants clearly shows that, prior to the effective date of the references, applicants had discovered that the binding of P-selectin and a ligand of P-selectin, and E-selectin and a ligand of E-selectin, is a contributing factor in the development of atherosclerosis lesions. The Examiner appears to have conceded this point.

The Examiner also appears to concede that this broad discovery encompasses the specific treatment method described in the pending claims of this application, except that applicants early conception and reduction to practice information does not include the specific inhibitory agent for practicing the invention as presently claimed. However, it is applicants' position that they originally contemplated a genus of inhibitory compounds for carrying out the invention, and that this genus would necessarily include the presently claimed species. Applicant's original claims

encompassed the genus as well as the species, and it is only as a result of the restriction requirement imposed by the Examiner that applicants were required to limit their claims to selected species. Applicants believe that in this situation, possession of the genus is sufficient to constitute possession of the species. The alternative result would require applicants to demonstrate possession of each and every species delineated in the restriction requirement, which would be manifestly unjust and unfair. See *In re Schaub*, *infra*.

Moreover, the declaration also states, in paragraph 9, that as a result of their discovery, applicants deduced that inhibitors of P-selectin and E-selectin could be used to treat atherosclerosis in mammals based on the elucidated role of P-selectin and/or E-selectin on the pathogenesis of atherosclerosis as claimed in the above-identified application.

Finally, the Examiner further states that the facts set out in the declaration should be sufficient to persuade one skilled in the art that the applicants possessed so much of the invention as shown in the references, citing *In re Schaub*, 190 USPQ 324 (CCPA 1976) and MPEP 715.03. Applicants concur with this statement, and believe that the declaration is adequate and sufficient to antedate the Cummings et al. reference since the declaration shows that applicants were in possession of the genus which included the species of Cummings et al.

As a further point regarding the declaration, the Examiner notes that development of a knockout mouse occurred from November 16, 1992 until September 13, 1993, while the experimental results were collected and analyzed on or about May 6, 1994. However, the declaration also makes clear that it took eight (8) months following the preparation of the mice for the mice to develop atherosclerosis since the mice are naturally resistant to atherosclerosis. Accordingly, applicants submit that they have demonstrated adequate diligence given the inherent limitations of the technology during the time the reduction to practice of the invention occurred.

Claims 71-73, 77-81 and 83-90 also stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting, on the basis of claims 40-41, 45, 49-52, 56, 59-60 and 73-74 of co-pending application Serial no. 09/436,076 and claims 39-88 of co-pending application Serial no. 09/863,642.

Applicants affirm that they would be prepared to file a terminal disclaimer to overcome this rejection should the claims be otherwise in condition for allowance.

In view of the foregoing facts and reasons, the present application is now believed to overcome the remaining rejections, and to be in proper condition for allowance. Accordingly, reconsideration and withdrawal of the rejections, and favorable action on this application, is solicited. The Examiner is invited to contact the undersigned at the telephone number listed below to discuss any matter pertaining to this application.

Respectfully submitted,

by William G. Gosz

William G. Gosz

Reg. No. 27,787

Ropes & Gray

One International Place

Boston, MA

Attorneys for Applicant(s)

Tel. No. (617) 951-7000

Date: